

22 JAN 1965

CUT54883

COPIES RECEIVED			
CyNo.	Office	Act.	Rec'd
1	Master File		
2	OS		
	ADMIN		
	SEC BR		
	P&DS		
	CSD		
	IPD		
	PD		
	PSD		
3	TID	✓	
	PAG		
	CIA/PID		
	DIAXX-4		
	SPAD		
	NSA LO		
	DIAAD		
	Destroyed		

P 220044Z
FM NPIC

AFSSO USAFE
AFSSO PACAF

CNO

OPCEN

YWQLAZC/AFSSO SAC
YWQLAZC/AFSSO ACIC
YWQLAZC/AFSSO FTD
ZEM

TOP SECRET TALENT KEYHOLE CHANNELS.

CITE NPIC 3695.

SUBJECT: CAMERA INFORMATION FOR MISSION 1016-1.

A. THIS PHOTOGRAPHY INVOLVES THE USE OF EIGHT CAMERAS: TWO MAIN CAMERAS, FOUR HORIZON CAMERAS, A STELLAR CAMERA, AND AN INDEX CAMERA.

B. OPERATIONAL FOCAL LENGTHS (MM)

	HORIZON				STELLAR	INDEX
	MAIN	PORT	STARBOARD			
FWD UNIT	609.625	55.05	54.90	(PART 1)	83.9835	38.2385
AFT UNIT	609.60	55.26	54.69	(PART 2)	83.9208	38.1016

C. LENS DISTORTION (PIN CUSHION) MM

(1) MAIN LENS	3	2	1	0	359	358	357
FWD UNIT	.001	.000	.000	.000	.000	.000	.000
AFT UNIT	.005	.003	.001	.000	NA	NA	NA

(2) HORIZON CAMERAS (MM)

FWD

25X1

25X1

25X1

25X1

25X1

TOP SECRET

-2-

	PORT	STARBOARD	PORT	STARBOARD
(RADIAL) 10 DEGREES	.000	.001	.003	.001
20 DEGREES	.001	.001	.004	.001
(TANGENTIAL) MAX VECTOR				
	.003	.003	.004	.003

D. DEPRESSION ANGLES OF HORIZON CAMERAS RELATIVE TO NOMINAL
MAIN CAMERA

	PORT	STARBOARD
FWD	14 DEGREES 29 MIN.	15 DEGREES 37 MIN.
AFT	14 DEGREES 55 MIN.	15 DEGREES 09 MIN.

E. CAMERA FILTER AND EXPOSURE DATA

	MAIN	HORIZON	STELLAR	INDEX
FILTER	FWD WRATTEN 25 AFT WRATTEN 21	WRATTEN 25	NONE	WRATTEN 21
APERTURE	F3.5	STARBOARD F8.0 PORT F6.8	F1.8	F4.5
SLIT WIDTH/EXPOSURE	FWD .250 INCH AFT .175 INCH	1/100 SEC.	2.0 SEC.	1/500 SEC.
FILM	4404	4404	4401	4400

F. RESOLUTION CAPABILITIES

(1) (L/MM AVG)	MAIN	PORT HORIZON	STARBOARD HORIZON
FWD	174	139	140
AFT	194	145	140
(2) INDEX (L/MM AWAR)	PART 1 73	PART 2 75	

G. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES

-3-

PER SECOND.

H. CALIBRATED ANGLES OF CAMERAS

- (1) CALIBRATED CONVERGENT ANGLE OF MAIN CAMERAS 29 DEGREES
47.24 MIN.
- (2) CALIBRATED ANGLE BETWEEN STELLAR AND INDEX CAMERAS
(PART 1) 89 DEGREES 52 MIN.
(PART 2) 90 DEGREES 02 MIN.

I. IMAGE MOTION COMPENSATION DATA

A. CYCLE RATE (CPS) AND GROUND ANGULAR VELOCITY (GAV IN RAD/SEC)

REF. LEVEL			AMPL. LEVEL		
NO.	CPS.	GAV.	NO.	CPS.	GAV.
7	.3250	.0294	4	.1290	.0117

B. PASSES: REF. 7, AMPL. 4 : 1D1 THRU 79D1

J. PROGRAM TIME DATA

PASS	CAMERA ON TIME				PROGRAM ON TIME	PROGRAM
	(ZEBRA TIME)				UP RAMP	DURATION
	DAY	HOUR	MIN	SEC	SEC	SEC
1D1	15	22	30	14	1376	40
2D1	15	23	57	46	1185	57
3D1	16	01	30	11	1292	112
5D1	16	04	32	53	1379	64
5D2	16	04	34	34	1479	127
6D1	16	06	01	54	1281	89
6D2	16	06	06	34	1561	55
6D3	16	06	08	29	1676	146
6D4	16	06	16	30	2157	88

- 4 -

6D5	16	06	18	36	2283	49
8D1	16	09	02	04	1266	272
9AE	16	10	14	24	168	50
10D1	16	12	18	36	2186	205
14D1	16	18	16	21	1911	70
15D1	16	19	40	18	1511	56
15D2	16	19	42	23	1636	56
15D3	16	19	44	18	1751	56
16D1	16	21	13	44	1682	37
18D1	17	00	08	16	1287	57
19D1	17	01	41	08	1425	70
20D1	17	03	10	02	1326	236
21D1	17	04	42	35	1444	88
21D2	17	04	45	29	1618	177
22D1	17	06	12	15	1390	73
22D2	17	06	18	49	1784	191
24D1	17	09	13	49	1407	247
25D1	17	10	46	18	1515	168
26D1	17	12	30	28	2330	62
30D1	17	18	25	52	1920	71
32D1	17	21	23	39	1716	39
34D1	18	00	18	29	1338	57
36D1	18	03	21	21	1444	232
37D1	18	04	51	41	1429	121
37D2	18	04	55	08	1636	116

- 5 -

37D3	18	04	57	57	1805	177
38D1	18	06	23	14	1490	103
38D2	18	06	26	25	1680	237
39D1	18	07	51	20	1331	318
40D1	18	09	22	14	1351	189
40D2	18	09	26	02	1580	133
41D1	18	11	07	17	2220	114
47D1	18	20	02	46	1748	37
52D1	19	03	31	50	1524	244
54D1	19	06	31	40	1448	67
54D2	19	06	33	22	1550	83
55D1	19	08	01	23	1399	107
55D2	19	08	04	23	1580	56
56D1	19	09	34	47	1600	134
57D1	19	11	16	47	2282	145
61D1	19	17	10	30	1777	56
62D1	19	18	40	18	1734	57
62D2	19	18	41	51	1826	56
63D1	19	20	12	07	1811	40
69D1	20	05	10	15	1509	72
69D2	20	05	14	30	1763	109
69D3	20	05	16	55	1909	168
70D1	20	06	40	05	1469	123
70D2	20	06	43	22	1665	87
71D1	20	08	10	39	1463	107
72D1	20	09	42	03	1515	187

-6-

77D1 20 17 24 09 2085 55

79D1 20 20 21 32 1864 40

NOTE: DATA IS THE SAME FOR BOTH THE MASTER (FWD) AND SLAVE (AFT)
UNITS.

K. TIME CORRELATION (MILLISECONDS)

PASS SYSTEM TIME CLOCK TIME DIFFERENCE

9	36932.0558	215619.8289	--
16	76481.0139	255168.7919	.011
25	37537.8623	302625.6459	.006
32	77078.2780	342166.0659	.004
41	38125.7462	389613.5389	.005
47	72224.7520	423712.5479	.003
56	33263.7689	471151.5689	.004
63	72786.6567	510674.4599	.003
72	33816.3693	21233.2639	.002
79	73347.2387	60764.1390	.006

NOTE: ALL "DIFFERENCE" VALUES ARE PLUS.

L. REMARKS

S/I UNITS PART 1 D55/55/50

PART 2 D59/50/59

T O B S E C R E T

--END OF MESSAGE--

1